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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,624	10/17/2003	David A. Young	BOE 0432 PA	2590

27256 7590 11/16/2004

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EXAMINER

DINH, TIEN QUANG

ART UNIT	PAPER NUMBER
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3644

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/688,624

**Applicant(s)**

YOUNG ET AL.

**Examiner**

Tien Dinh

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 3, "hoop-like" is vague and indefinite.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5-8, 11-13, 31, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alie in view of Flamand et al.

Alie discloses an aircraft having architectural archways with an upper crown portion, and floor member. The archways are curved with two spaced apart end members within the fuselage. There is a lavatory and flight attendant seat member in the archway. Furthermore, the archways are positioned adjacent to and framing a door member. The archways form a passageway for passage of system component of the aircraft. The passageway allows the passengers or personnel to put a system component (such as a toilet seat for example) to a room that is made up

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by the fuselage and the archways. Please see figure 3. Alie is silent on the lower lobe portion.

However, Flamand et al teaches a lower lobe portion is well known in the art.

It would have been obvious to one skilled in the art at the time the invention was made to have used a lower lobe portion in Alie's system as taught by Flamand et al to carry more cargos.

Claims 3, 10, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alie in as modified by Flamand et al as applied to claims 1 and 7 above, and further in view of Brill.

Alie as modified by Flamand et al discloses all claimed parts except for the use of hollow archways that are V-shaped, U-shaped or semi-circular shaped in cross-section. However, Brill discloses that certain shaped (such as U or V) cross sections of archways are well known in the art.

It would have been obvious to one skilled in the art to one skilled in the art at the time the invention was made to have used archways having V-shaped or U-shaped cross sections in Alie's system as modified by Flamand et al and as taught by Brill to create a stronger fuselage and more ascetically pleasing interior.

Claims 2, 4, 9, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alie in as modified by Flamand et al as applied to claims 1 and 7 above, and further in view of Brill and Robillard et al.

Alie as modified by Flamand et al discloses all claimed parts except for the use of hollow archways with components of the aircraft. However, Brill discloses that certain shaped (such as

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U or V) cross sections of archways are well known in the art. Furthermore, Robillard et al teaches that system components that run thru a hollow passageway of an aircraft is well known in the art (see figure 2).

It would have been obvious to one skilled in the art to one skilled in the art at the time the invention was made to have used archways having hollow cross sections and run components thru the hollow cross sections in Alie's system as modified by Flamand et al and as taught by Brill and Robillard et al to create a stronger fuselage and to hide the components from the passengers.

Claims 14-30 and 37-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alie in view of Flamand et al, Robillard et al, and Brill.

Alie discloses an aircraft having architectural archways with an upper crown portion, and floor member. The archways are curved with two spaced apart end members within the fuselage. There is a lavatory and flight attendant seat member in the archways. Furthermore, the archways are positioned adjacent to and framing a door member. The archways form a passageway for passage of system component of the aircraft. Please see figure 3. Alie is silent on the lower lobe portion and the use of hollow archways that are V-shaped, U-shaped or semi-circular shaped in cross-section with system components such as wires running in the hollow archways. However, Flamand et al teaches a lower lobe portion is well known in the art. Brill discloses that certain hollow shaped (such as U or V) cross sections of archways are well known in the art. Furthermore, Robillard et al teaches that system components that run thru a hollow passageway of an aircraft is well known in the art (see figure 2).

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It would have been obvious to one skilled in the art at the time the invention was made to have used a lower lobe portion in Alie's system as taught by Flamand et al to carry more cargos.

In addition, it would have been obvious to one skilled in the art at the time the invention was made to have used hollow archways having V-shaped or U-shaped cross sections in Alie's system as modified by Flamand et al and as taught by Brill to create a stronger fuselage and more ascetically pleasing interior.

Furthermore, it would have been obvious to one skilled in the art to one skilled in the art at the time the invention was made to have run components thru the hollow cross sections in Alie's system as modified by Flamand et al and Brill and as taught by Robillard et al to create a stronger fuselage and to hide the components from the passengers.

Re claims 17, 18, 27 and 28, it would have been obvious to one skilled in the art at the time the invention was made to have used support system conduits in the crown and lower lobe portion to separate the components so that the passengers cannot see the support system conduits.

Re claims 22 and 23, Alie discloses the archway member being used as a divider.

### ***Response to Arguments***

The Examiner respectfully disagrees with the applicant's arguments that "definite and not vague." The term "hoop-like" is indefinite since the Examiner does not know if it is a hoop or not. Furthermore, what the applicant has disclosed in the drawings are not hoops but are arches. Therefore, the term "hoop-like" is vague and indefinite.

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The Examiner as best understood in claim 1 broadly interprets the elements of Alie in figure 3 as archways comprising a curved inverted “hoop-like” structure. This meets what has been claimed.

Re claims 5 and 12, the bathroom is in the archway structure adjacent one of the end members in Alie.

Re claims 6 and 13, there is a seat in the archway structure in Alie.

Re claim 7, please note that in figure 3, there are disclosed multiple archways that frames a door member. A door member is inherent since there is a bathroom and bathrooms have doors.

RE claim 8, the archways’ end members are adapted on the floor member on opposite sides of the fuselage in Alie.

RE claim 11, Alie does show an integral passageway in the archway structure.

Please note that the Brill reference does disclose that certain shaped (such as U or V) cross sections of archways are well known in the art. The combination of the arts would allow a more ascetically pleasing interior.

As for the arguments on the Robillard et al reference, please note that it is used to teach that system components that run thru a hollow passageway of an aircraft is well known in the art. When combined with the other references in the rejections above, the claimed subject matters are met by the combined references.

Re claims 17, 18, 27, and 28, it would have been obvious to one skilled in the art at the time the invention was made to have used support system conduits in the crown and lower lobe portion to separate the components so that the passengers cannot see the support system conduits

Alie does indeed show dividers, which meets what has been claimed.

*Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tien Dinh whose telephone number is 703-308-2798. The examiner can normally be reached on 9-6.

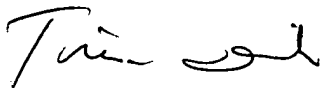
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on 703-306-4198. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TD

A handwritten signature in cursive script, appearing to read "Tim [unclear]".